P-W

HACKBERRY, PINAL CO.
S/2 Sec 8-T5S-R14E, No Permit 11-6

32 ×

County Pinal

Area

Lease No.

Well Name Hackberry

Location sw se se S/2 Sec 8 Twp 5S Range 14E Footage ~550 fsl 1300 fel

Elev 2240' Gr KB Spud Date Completed Abandon 1905 Total Depth 700

Contractor

Drilled by Rotary
Cable Tool

Casing Size	Depth	Cement

Production Horizon

Initial Production

REMARKS See photo Ransome, USGS Prof. Paper 115 plate 26 dated 1919. p.73-75.
7.5' Kearny Quadrangle ⇒ sw se se section 5 elev ~ 2240'

Elec Logs

Sample Log
Sample Descript.
Sample Set
Core Analysis
DSTs

Applic. to Plug Plugging Record Completion Report

Water well accepted by

Bond Co. & No.

Bond Am't $ Cancelled Date Organization Report

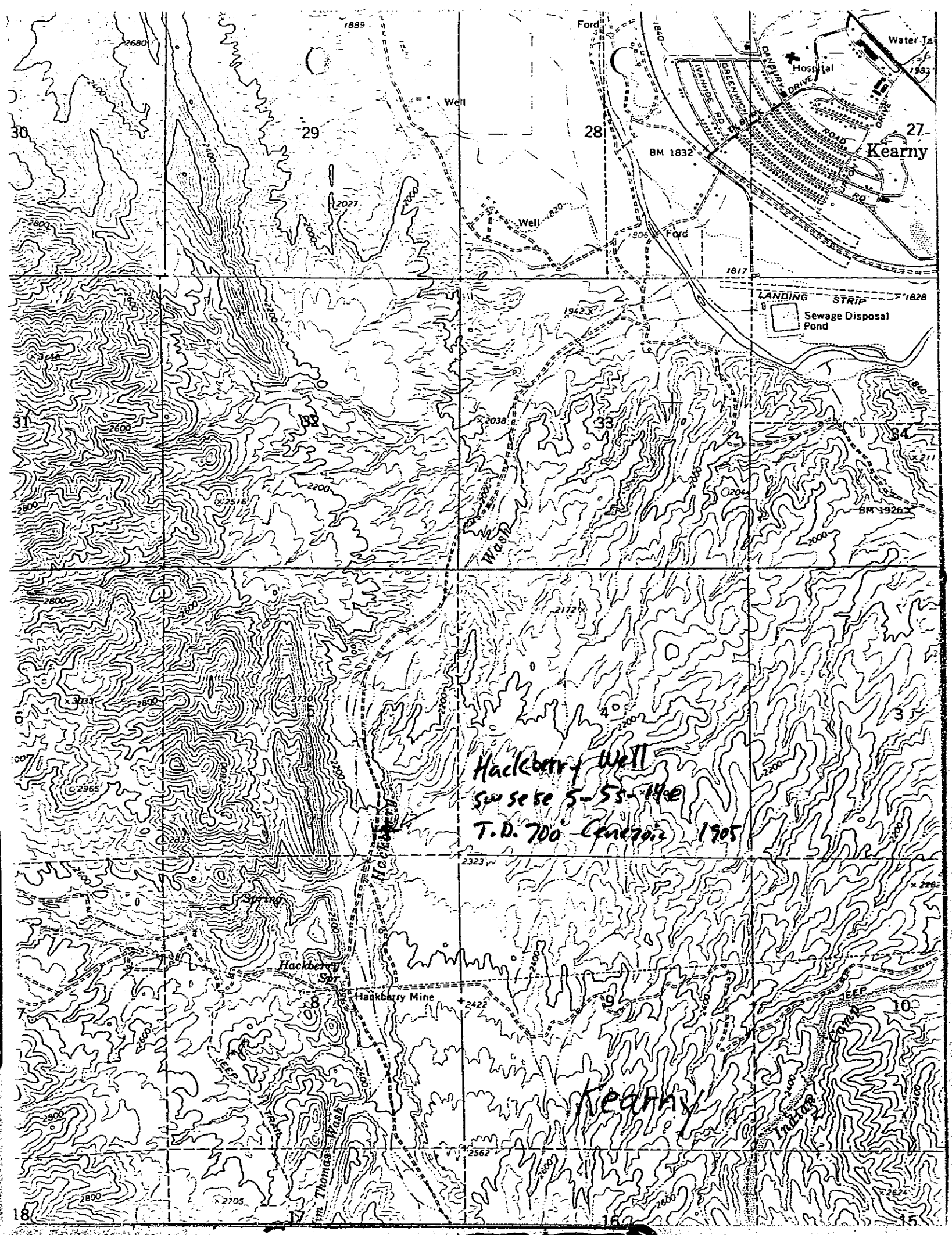
Filing Receipt Dated Well Book Plat Book

Loc. Plat Dedication

API NO. 02-021-05007

Permit Number — Date Issued

#11-6


Ford
Water Ta
Hospital
DANBURY DRIVE
GREENWICH RD
IVANHOE RD
ROAD
DRIVE
RD
27
Kearny
BM 1832
Well
Well
Ford
LANDING STRIP
Sewage Disposal Pond
BM 1926
Wash
30
29
28
31
32
33
34
Hackberry Well
SW SE SE 5-5S-19E
T.D. 700' Cement 1905
Spring
Hackberry Spr
Hackberry Mine
Hackberry
JEEP TRAIL
Jim Thomas Wash
Indian Camp
JEEP
7
8
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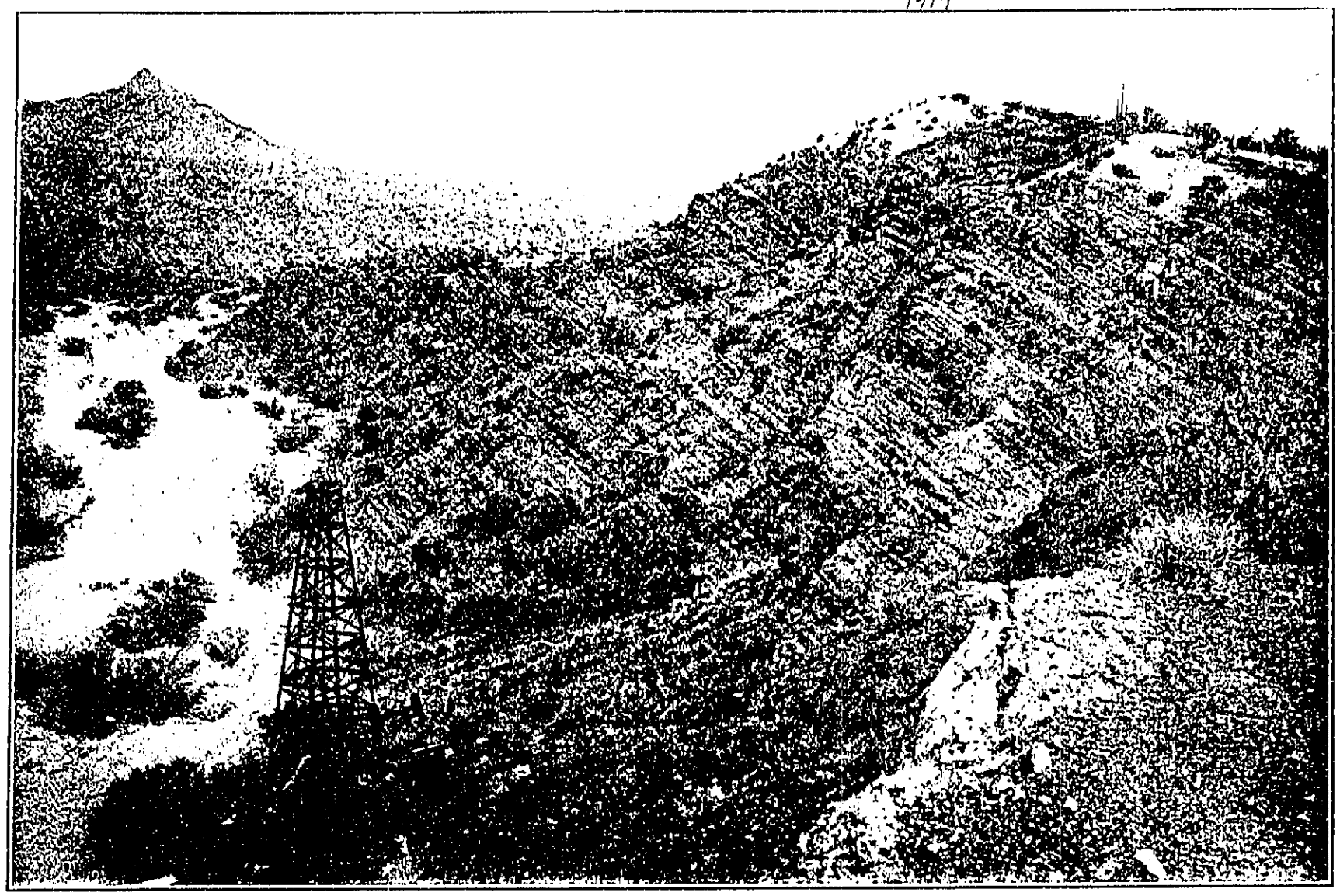
1919



A. UNUSUALLY WELL STRATIFIED AND STEEPLY TILTED MATERIAL PROVISIONALLY INCLUDED WITH THE GILA CONGLOMERATE.

Exposure is near Hackberry Spring, in the southwestern part of the Ray quadrangle. The direction of view is nearly north. The derrick records an attempt to find oil under these beds.

Photo taken ~ 1903-1904

1919

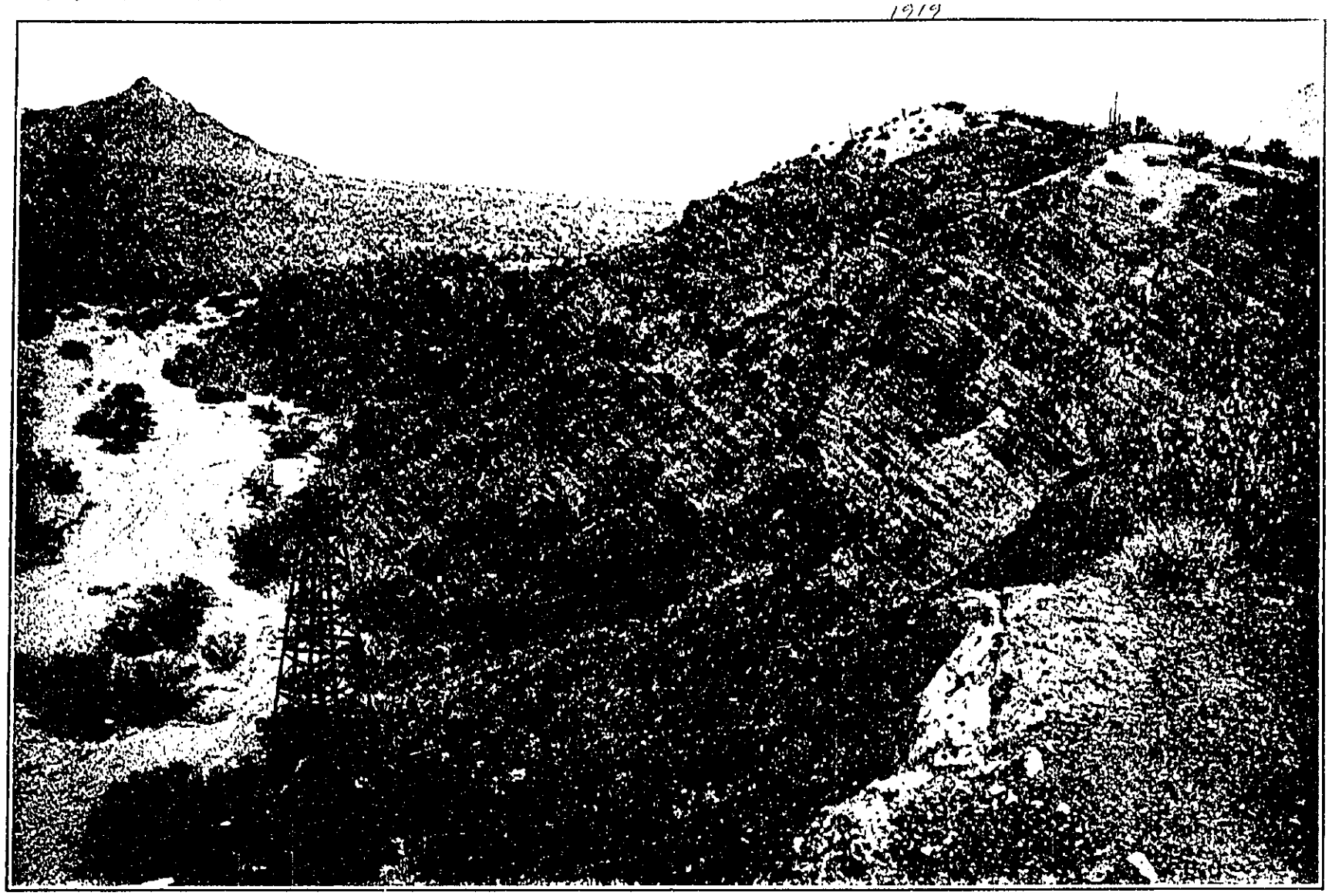


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Photo taken ~ 1903 - 1904

Near Hackberry Spring (see Pl. II) the Gila formation consists of well-bedded coarse sandstone, composed almost entirely of partly rounded granitic crumbs derived from the coarse pre-Cambrian granite of the Tortilla Range. Along the upper, north-south portion of Hackberry Wash the Gila is prevailingly reddish and sandy and occurs in beds for the most part about a foot thick. These beds consist largely of andesitic detritus and contain some fragments of andesite as much as 2 feet across. A view of these beds as exposed on the east side of Hackberry Wash is shown in Plate XXVI, *A*. Stratigraphically under them and lapping up against the Paleozoic rocks to the west (Pl. XXVI, *B*) is fully 100 feet of soft, crumbling brownish-gray sandstone and sandy shale. There is much faulting in this vicinity, and the silty material is probably faulted against the older rocks and is not the real base of the Gila formation. Where the basal part of the formation is exposed, as farther north along the east side of the Tortilla Range, it consists of coarse fragments of obviously local derivation. The brown sand and shale is made up principally of mineral particles derived from the granite of the range.

In the extreme southwest corner of the Ray quadrangle is a synclinal basin of Gila conglomerate surrounded for the most part by hills of pre-Cambrian granite. This basin is drained by the intermittent Ripsey Wash, near the mouth of which, about 3 miles west of Kelvin, the Gila formation may be seen resting on the granite. Here the formation consists of light pinkish-gray tuffaceous-looking beds carrying fragments of granite in a matrix composed largely of volcanic material, apparently dacitic. The beds vary much in thickness, ranging from shaly seams to strata measuring over 6 feet. Other facies appear farther south. Much of the material is a coarse breccia, the beds of which are thick and rather vaguely laminated. Blocks of granite 3 feet in greatest length are embedded in coarse granitic sand or in a matrix of granitic and dacitic débris. In places beds of soft sandstone or fine silt separate the coarser layers.

The beds southwest of Gila River are in part so different from the Gila conglomerate in other parts of the quadrangle and are as a whole so much better stratified that my inclination at first was to regard them as a distinctly older formation, probably having an unconformable relation to the Gila. No evidence of unconformity, however, could be detected, and the well-bedded material appears to grade upward and laterally into Gila conglomerate of the common variety. Evidently the basin in which deposition took place in the southwestern part of the Ray quadrangle was exceptionally deep, and rapidly accumulating coarse fluviatile material graded at times into finer sediments laid down in comparatively still water.

The deformation of these beds is considered under "Structure" (pp. 75–80).

The accumulation of the Gila conglomerate is clearly indicative of intensely active erosion consequent upon the period of vigorous deformation that outlined the present mountains and valleys of the region. As a result of the block faulting and earth movements that followed the eruption of the dacite, the mountain ranges were much higher than at present and the larger or structural valleys much deeper. Consequently the stream grades were steep and the erosive and transporting powers of the running water were far greater than they are now in the same region. Possibly the greater height of the mountains was accompanied by greater precipitation than at present, but the general character of the deposit points to a decided preponderance of mechanical disintegration over rock decay and to an arid rather than a humid climate.

The same indication is afforded by the occurrence of gypsum associated with the silty facies of the Gila formation on Salt River north of the area here specially considered. To one familiar with the intensive work occasionally accomplished in a few hours by the fierce rush of local storm water along one of the present streamways there appears to be little necessity to require any great increase in precipitation to account for the deposition of the Gila conglomerate under the conditions of waste supply and grade then prevailing. Some increase there may have been, but not enough to make the conditions of plant growth, rock disintegration, erosion, transportation, and deposition very different in kind from those of to-day.

The thickness of the Gila formation varies greatly from place to place, and probably no measurement gives the true maximum. Between Hackberry Spring and Gila River near

PP. 115, Ransome, 1919